

10/538310

JC20 Rec'd PCT/PTO 09 JUN 2005

Dkt. 60919-PCT-US/JPW/JW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Donald W. Landry and Shi-Xian Deng
U.S. Serial No. : Not Yet Known (S371 national stage of
PCT International Application No.
PCT/US2003/039207)
Filed : Herewith
For : PEPTIDES AND METHODS FOR DEACTIVATION
OF ORGANOPHOSPHORUS-BASED NERVE AGENTS
AND INSECTICIDES

1185 Avenue of the Americas
New York, New York 10036
June 9, 2005

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

In order to ensure compliance with applicants' duty of disclosure under 37 C.F.R. §1.56 and §1.97(a)-(d), applicants request that the following documents be considered and made of record in the above-identified which is listed on Form PTO-1449, attached hereto as **Exhibit A**.

1. International Search Report issued by the International Searching Authority issued April 4, 2005 in connection with related International Application No. PCT/US2003/039207 (**Exhibit 1**);
2. U.S. Patent No. 5,843,758 A (Russell, et al.), published December 1, 1998 (**Exhibit 2**);
3. Cho, C. M.-H., Mulchandani, A., and Chen, W. (2002). Bacterial Cell Surface Display of Organophosphorus Hydrolase for Selective Screening of Improved Hydrolysis of Organophosphate Nerve Agents. *Appl.*

Environ. Microbiol. 68: 2026-2030 (**Exhibit 3**);

4. International Publication No. WO 99/16417, Flemington Pharmaceutical Corporation, published April 8, 1999 (**Exhibit 4**);
5. International Publication No. WO 00/48684, Her Majesty in Right of Canada as represented by The Minister of National Defence, published August 24, 2000 (**Exhibit 5**);
6. International Publication No. WO 00/51687, John G. Bureaux, published September 8, 2000 (**Exhibit 6**);
7. International Publication No. WO 00/49363, John G. Bureaux, et al., published August 24, 2000 (**Exhibit 7**);
8. International Publication No. WO 01/85318 A2, John G. Bureaux and Roger Sabourin, published November 15, 2001 (**Exhibit 8**);
9. U.S. Patent No. 4,312,946, Wood, et al., published January 26, 1982 (**Exhibit 9**);
10. U.S. Patent No. 6,080,566, Cheng, et al., published June 27, 2000 (**Exhibit 10**);
11. U.S. Patent No. 5,928,927, Cheng, et al., published July 27, 1999 (**Exhibit 11**);
12. Cheng, T.-C., Harvey S. P., and Chen, G. L. (1996). Cloning and Expression of a Gene Encoding a Bacterial Enzyme for Decontamination of Organophosphorus Nerve Agents and Nucleotide Sequence of the Enzyme. *Appl. Environ. Microbiol.* 62: 1636-1641 (**Exhibit 12**);
13. Gill, I. and Ballesteros, A. (2000). Degradation of

10/538310

Applicants: Donald W. Landry and Shi-Xian Deng

U.S. Serial No.: Not Yet Known

Filed: Herewith

Page 3

JC20 Rec'd PCT/PTO 09 JUN 2005

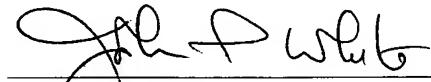
Organophosphorus Nerve Agents by Enzyme-Polymer
Nanocomposites: Efficient Biocatalytic Materials for
Personal Protection and Large-Scale Detoxification.
Biotechnol. Bioeng. 70: 400-410 (**Exhibit 13**);

14. LeJeune, K. E. and Russell, A. J. (1999). Biocatalytic Nerve Agents Detoxification in Fire Fighting Foams. *Biotechnol. Bioeng.* 62: 659-665 (**Exhibit 14**);
15. LeJeune, K. E., Wild, J. R., and Russell, A. J. (1998). Biocatalytic Nerve Agents Detoxification in Fire Fighting Foams. *Nature* 395: 27-28 (**Exhibit 15**); and
16. LeJeune, K. E., Dravis, B. C., Yang, F., Hetro, A. D., Doctor, B. P., and Russell, A. J. (1998). Fighting Nerve Agent Chemical Weapons with Enzyme Technology. *Ann. N.Y. Acad. Sci.* 864: 153-170 (**Exhibit 16**).

Copies of documents numbers 1-16 are attached hereto as Exhibits 1-16 respectively.

No fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



John P. White
Registration No. 28,678
Attorney for the Applicants
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, New York 10036
(212) 278-0400

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheets

1

of

Attorney Docket Number

60919-PCT-US/JPW/JW

Complete if Known

1015483

Not Yet

Herewith

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ , Number ⁴ , Kind Code ⁵ (if known)				
	4	WO 99/16417	04-08-1999	Flemington Pharmaceutical Corporation		
	5	WO 00/48684	08-24-2000	Her Majesty in Right of Canada as represented by The Minister of National Defence		
	6	WO 00/51687	09-08-2000	John G. Bureaux		
	7	WO 00/49363	08-24-2000	John G. Bureaux, et al.		
	8	WO 01/85318 A2	11-15-2001	John G. Bureaux and Roger Sabourin		

Examiner Signature	Date Considered
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language	

Translation is attached.
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO				Complete if Known	
				Application Number	Not Yet Known
				Filing Date	Herewith
				First Named Inventor	Donald W. Landry
				Art Unit	
				Examiner Name	
Sheet	2	of	2	Attorney Docket Number	60919-PCT-US

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ²
	1	International Search Report issued by the International Searching Authority issued April 4, 2005 in connection with related International Application No. PCT/US2003/039207				
	3	Cho, C. M.-H., Mulchandani, A., and Chen, W. (2002). Bacterial Cell Surface Display of Organophosphorus Hydrolase for Selective Screening of Improved Hydrolysis of Organophosphate Nerve Agents. <i>Appl. Environ. Microbiol.</i> 68: 2026-2030.				
	12	Cheng, T.-C., Harvey S. P., and Chen, G. L. (1996). Cloning and Expression of a Gene Encoding a Bacterial Enzyme for Decontamination of Organophosphorus Nerve Agents and Nucleotide Sequence of the Enzyme. <i>Appl. Environ. Microbiol.</i> 62: 1636-1641.				
	13	Gill, I. and Ballesteros, A. (2000). Degradation of Organophosphorus Nerve Agents by Enzyme-Polymer Nanocomposites: Efficient Biocatalytic Materials for Personal Protection and Large-Scale Detoxification. <i>Biotechnol. Bioeng.</i> 70: 400-410.				
	14	LeJeune, K. E. and Russell, A. J. (1999). Biocatalytic Nerve Agents Detoxification in Fire Fighting Foams. <i>Biotechnol. Bioeng.</i> 62: 659-665.				
	15	LeJeune, K. E., Wild, J. R., and Russell, A. J. (1998). Biocatalytic Nerve Agents Detoxification in Fire Fighting Foams. <i>Nature</i> 395: 27-28.				
	16	LeJeune, K. E., Dravis, B. C., Yang, F., Hetro, A. D., Doctor, B. P., and Russell, A. J. (1998). Fighting Nerve Agent Chemical Weapons with Enzyme Technology. <i>Ann. N.Y. Acad. Sci.</i> 864: 153-170.				

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.